

**From:** Maria Fernandez [MFernandez@SiegelGas.com]  
**Sent:** Monday, January 12, 2004 3:09 PM  
**To:** Stephan Lamarque  
**Subject:** MATERIA SAFETY DATA SHEET

**Flag Status:** Flagged

**MATERIAL SAFETY  
DATA SHEET**  
**LIQUEFIED PETROLEUM GAS**  
**UN 1075**  
**(Propane)**

**Siegel Gas & Oil Corp.**

~~7400 N.W. 30<sup>th</sup> Ave.~~  
Miami, FL 33147

**Section I MATERIAL SAFETY DATA SHEET**

Supplier's Name: **Siegel Gas & Oil Corp.**

For Emergency Response: **(877) 438-2343**

Supplier's Address: **7400 N.W. 30<sup>th</sup> Ave. Miami, FL 33147**

Chemical Name: **LIQUEFIED PETROLEUM GAS (PROPANE)**

**Formula: C<sub>3</sub>H<sub>8</sub>**

CAS Registry No.: **74-98-6**

Chemical Family: **Hydrocarbon**

**WARNING: Danger! Extremely flammable. Compressed Gas**  
**Asphyxiant in high concentrations. Contact with liquid causes burns**  
**similar to frost bite. OSHA permissible exposure limit:**  
**(PEL) 1000 ppm for an 8-hour workday.**

**Appearance and Odor: Vapor and liquid are colorless. Product**  
**contains an odorant (unpleasant odor).**

**Section II HAZARDOUS INGREDIENTS**

Hazardous Mixtures: **Air with 2.15 to 9.60 percent propane**

**Section III PHYSICAL DATA**

Boiling Point: **-44 & ordm; F**

Vapor Pressure (PSIG) at 100 & ordm;F: **205**

Specific Gravity (H<sub>2</sub>O = 1): **0.51**

Percent, Volatile by Volume (%): **100**

Vapor Density (air = 1): **1.52**

Evaporation rate: **Gas at normal ambient temperatures**

Solubility in Water: **Slightly**

**Section IV FIRE AND EXPLOSION HAZARD DATA**

Flash Point: **156 & ordm; F(CC)**

Classification: **Flammable Gas UN 1075**

Flammable Limits – LFL: **2.15** \_\_\_\_ UFL: **9.60**

Extinguishing Media: **Water spray-Class A-B-C or**  
**BC fire extinguisher.**

**Special Fire Fighting Procedures:** Stop flow of gas. Use water to keep fire exposed containers cool. Use water spray to disperse un-ignited gas or vapor. If ignition has occurred and no water available, tank metal may weaken from overheating. Evacuate area. If gas has not ignited, LP-gas liquid or vapor may be dispersed by water spray or flooding.

**Decomposition Products under Fire Conditions:** Fumes, smoke, carbon monoxide, aldehydes and other decomposition products, in the case of incomplete combustion or when used as an engine fuel.

**"EMPTY" Container Warning:** "Empty" containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to clean since residue is difficult to remove. All containers should be disposed of in safe manner and in accordance with regulations.

### Section V HEALTH HAZARD

**OSHA P.E.L.:** 1000 PPM **ACGIH TLV:** 1000 PPM **Effects of Overexposure:** Inhalation – concentrations can lead to symptoms ranging from dizziness to anesthesia and respiratory arrest. Eyes - moderate irritation.

**Emergency & First Aid procedures:** Inhalation - remove to fresh air. Guard against self injury. Apply artificial respiration if breathing has stopped. Exposure to skin – Flush with warm water for 5 minutes or more.

### Section VI REACTIVITY DATA

**Stable:** **X** **Unstable:** \_\_\_\_\_ **Hazardous Decomposition Products:** **None**

**Incompatibility (materials to avoid):** Mixing with oxygen or air, except at burner

**Hazardous Polymerization:** May occur \_\_\_\_\_ Will not occur **X**

### Section VII SPILL OR LEAK PROCEDURES

**Steps to be taken in case material is released:** Keep public away. Shut off supply of gas. Eliminate sources of ignition. Ventilate the area. Disperse with water spray. Contact between skin and these gases in liquid form can cause freezing of tissue causing injury similar to thermal burn.

**Waste Disposal Method:** Controlled burning. Contact supplier.

### Section VIII SPECIAL PROTECTION INFORMATION

**Respiratory Protection:** Stay out of gas or vapor (because of fire hazard).

**Ventilation:** Explosion-proof motors and keep sources of ignition at safe distances.

**Personal Protective Equipment and Apparel:** Gloves resistant to the actions of LP-gases, goggles for protection against accidental release of pressurized products.

### Section IX SPECIAL PRECAUTIONS

**Precautions to be taken when handling and storing:** Keep containers away from heat sources. Store in upright position. Containers should not be dropped. Keep container valve closed when not in use.

**Other Precaution:** Install protective caps and plug container service valve when not connected for use.

### Section X TOXICOLOGICAL INFORMATION

**OSHA Carcinogen Classification (29 CFR 1910)** Not listed/ applicable   X  

**U.S. Department of Health (21 CFR 184.1655):** Generally recognized as safe (GRAS) as a direct human food ingredient when used as a propellant, aerating agent and gas as defined in Section 170.3(o)(25).

### Section XI DOT LABELING INFORMATION (49 CFR 100-199)

**Proper shipping name:**

**Liquefied Petroleum Gas**

**Hazardous Classification:**

**2.1 Flammable Gas**

**Identification No.:**

**UN 1075**

**Label(s) Required:** **Flammable Gas and**

**Liquefied Petroleum Gas or Propane**

### Section XII ISSUE INFORMATION

Issue Date: July 1, 2000

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**For additional information contact: Siegel Gas & Oil Corp. (305) 691 4411**